



From “Our Common Future” to green growth and green jobs

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Publication date:
2009

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Citation (APA):

Olsen, K. H. (2009). *From “Our Common Future” to green growth and green jobs*. Paper presented at International Labor Union Course, Turin, Italy.

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From “Our Common Future” to green growth and green jobs

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Green jobs

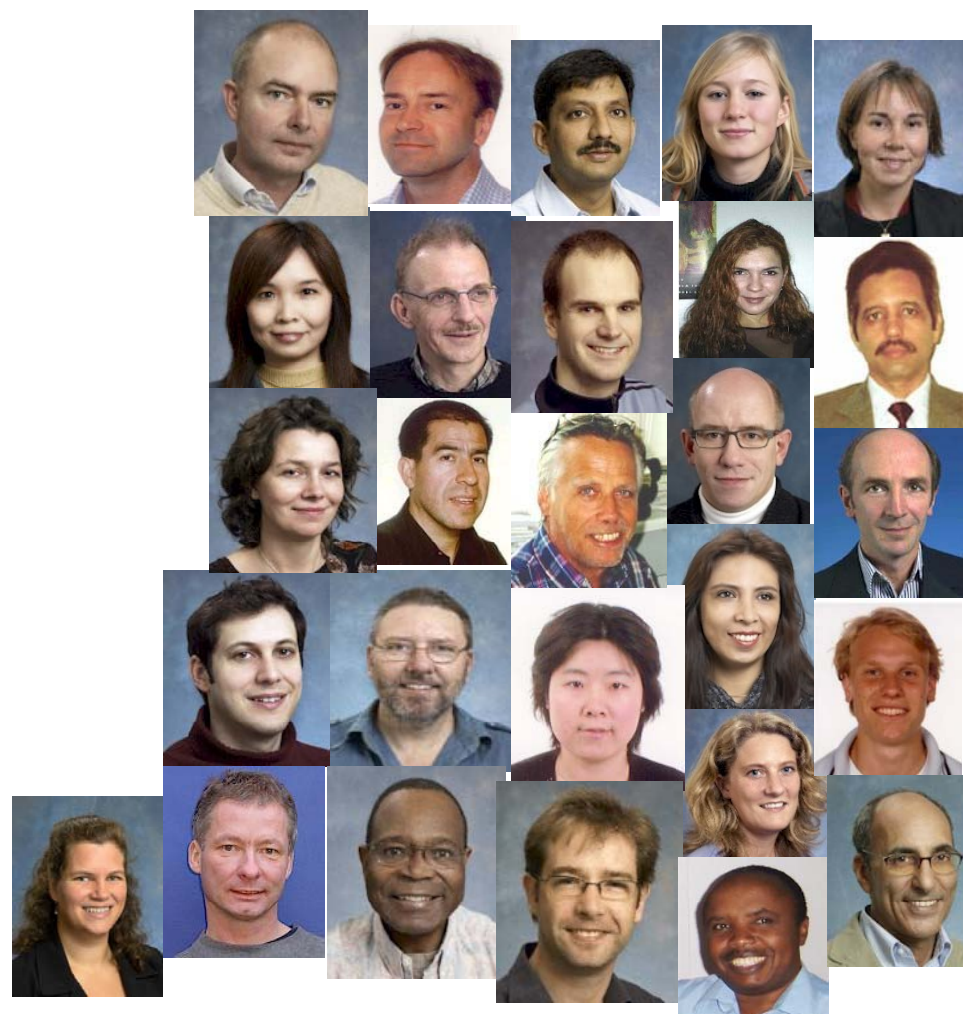
ITC-ILO Turin, 19-23 October 2009

UNEP Risoe Centre – Energy, Climate and Sustainable Development

International research team of over 30 economists and scientists.

Based on agreement between Risø, UNEP and Danida.
Located at Roskilde, Denmark since 1990.

Mandate is to support and promote UNEP activities in the areas of energy and climate change, with a special emphasis on developing countries.



Outline

- Awareness about climate change
- Intergovernmental Panel on Climate Change (IPCC)
- United Nations Framework Convention on Climate Change (UNFCCC)
- Kyoto Protocol (KP)
- Post-2012 climate negotiations

Awareness about climate change

Environment and sustainable development – historical events

1968 – The Club of Rome: 'Limits to Growth', 1972

1972 – UN Conference on Human Environment, Stockholm

1972 – UNEP was founded as the result of the Stockholm Conference

1983 – UN World Commission on Environment and Development

- recognized that it was in the common interest of all nations to establish policies for sustainable development.

1987 – Brundtland Report- Our Common Future

1992 – UN Conference on Environment and Development, Rio de Janeiro

- The Rio Declaration on Environment and Development
- Agenda 21
- Principles on forests
- Convention on Biological Diversity
- Framework Convention on Climate Change

2002 – World Summit on Sustainable Development (Rio+10)

- Johannesburg Plan of Action

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Our Common Future

Development of climate change awareness

1980-1990 - a series of scientific conferences focused on climate change. The issue emerged from science onto the international political stage, when the UNGA declared it 'a concern of mankind' in 1988

1988 - UNEP and WMO establish the IPCC

1990 - **First IPCC Assessment Report**, compiled the existing scientific evidences for global climate change.

1990 - the UN General Assembly approved the start of treaty negotiations under the UNFCCC

1992 - Rio "Earth Summit", the UNFCCC was signed by 154 states at the Rio de Janeiro Earth Summit.

March 21st 1994, the convention **entered into force**

The UNFCCC – ratified by 192 countries



Awareness of CC has grown from ignorance in the 1980s to high politics in the late 2000s, i.e. in only three decades

Intergovernmental Panel on Climate Change (IPCC)

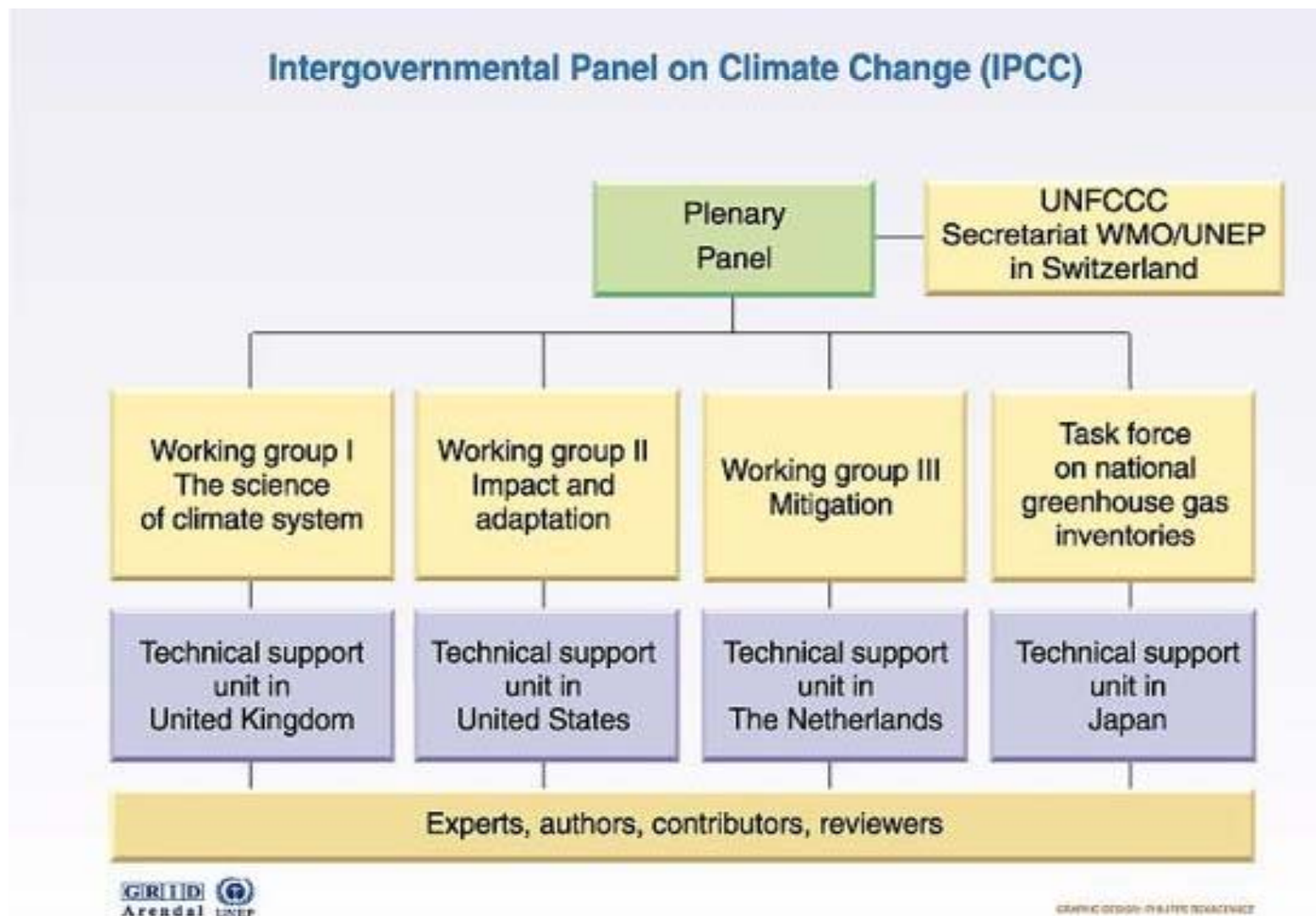
What is IPCC?

A panel of government members (192) selecting scientists from all countries to assess existing and emerging scientific literature on CC with an aim to objectively inform policymakers about:

- causes of climate change
- impacts, vulnerability and adaptation
- mitigation options



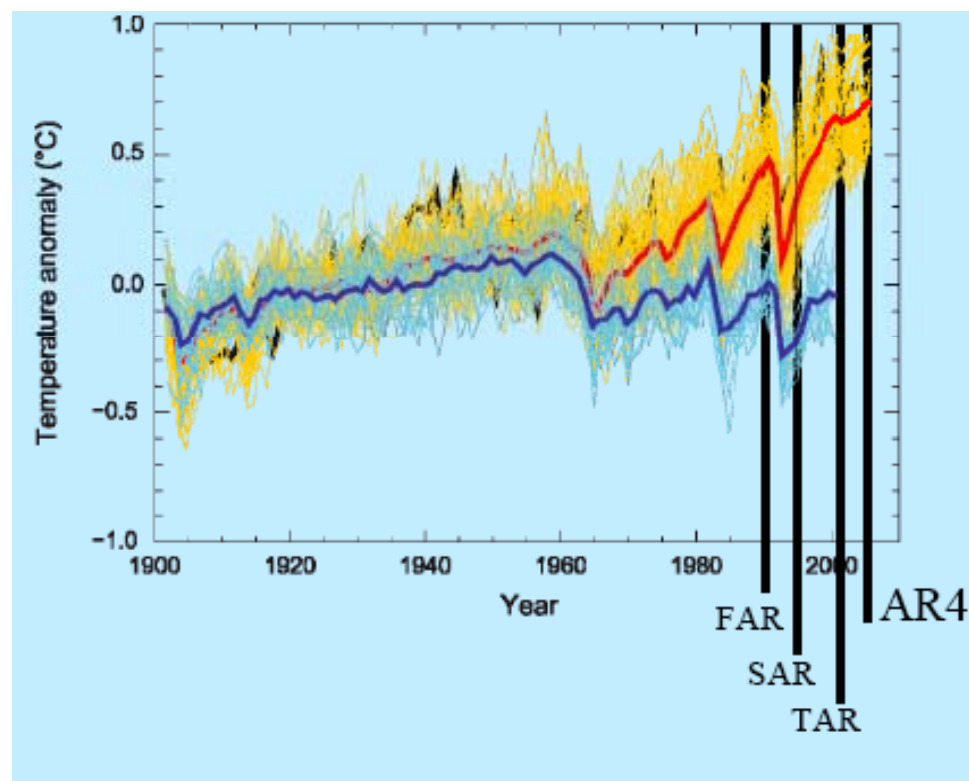
Structure of IPCC



Source: United Nations framework convention on climate change (UNFCCC).

Greater Certainty in Attribution

- FAR (1990): “unequivocal detection not likely for a decade”
- SAR (1995): “balance of evidence suggests discernible human influence”
- TAR (2001): “most of the warming of the past 50 years is likely (odds 2 out of 3) due to human activities”
- AR4 (2007): “most of the warming is very likely (odds 9 out of 10) due to greenhouse gases”



Science and politics

- The IPCC does not carry out research itself. Rather, the IPCC conducts a massive *review* of climate change research
 - The IPCC is not mandated to make policy recommendations; but rather to be 'policy relevant but not prescriptive'
 - The Summary for Policy Makers of each AR is subject to political negotiations among IPCC member governments in the presence of lead authors
 - A Special Committee for the Participation of Developing countries was convened 1989-1992 due to mistrust that emerging science on CC came from only a handful of industrialised countries in the early days of awareness
- 'A science-based approach' means that politicians should base their decisions on e.g. IPCC scenarios to avoid dangerous human interference with the climate system

United Nations Framework Convention on Climate Change (UNFCCC)

What is UNFCCC?

UN Framework Convention on Climate Change provides an overall framework for intergovernmental efforts to address climate change.

It establishes an objective & principles, commitments for different groups of countries, and a set of institutions all of which work to enable continued talks as well as *future* actions to address global climate change.



Ultimate Objective of UNFCCC

“to achieve . . .stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”

“such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, & to enable economic development to proceed in a sustainable manner”

-- ARTICLE 2

UNFCCC Principles – Article 3

Common but differentiated responsibilities

- Industrialized countries should take a lead in combating CC
- Recognize poor countries' rights to economic development
- Full consideration for developing country needs and circumstances

Precautionary principle/approach

- to combat climate change even if there is a lack of “full scientific certainty” regarding a cause & effect relationship

Principle of cost-effectiveness

- all policies and measures that deal with climate change are to be cost-effective.

Principle of sustainable development

- Recognize “the parties have a right to, and should, promote sustainable development”

Commitments under UNFCCC – Article 4

COUNTRY GROUP	ANNEX I	ANNEX II	NON-ANNEX I
Members	Developed country Parties incl. economies in transition (EITs)	Developed country Parties excl. EITs	Developing countries
Mitigation	<ul style="list-style-type: none"> Adopt policies and measures with the aim of reducing their GHG emissions to 1990 levels by 2000 	<ul style="list-style-type: none"> Provide financial resources to enable developing countries to <i>mitigate</i> 	<ul style="list-style-type: none"> All Parties take mitigation actions but no quantitative aims Least Developed Countries given special consideration
Adaptation	<ul style="list-style-type: none"> Implement strategies of integrating adaptation in development 	<ul style="list-style-type: none"> Assist developing countries to adapt to climate change 	<ul style="list-style-type: none"> Implement strategies of integrating adaptation in development

UNFCCC Institutions – Articles 7-11

Conference of the Parties (COP):

- Decision making body of the Convention

Subsidiary Body for Scientific and Technological Advice (SBSTA)

- Provide scientific and technological advice to COP

Subsidiary Body for Implementation (SBI).

- Provide implementation advice to COP

Convention Secretariat

Global Environment Facility (GEF)

- Financial mechanism

Intergovernmental Panel on Climate Change (IPCC)

- Submit assessment on state of climate change science / 5 yrs

Kyoto Protocol

History of Kyoto Protocol

No mandatory targets under the UNFCCC

- Developed countries agreed to a non-binding aim of reducing their emissions to 1990 levels by 2000.

1995 - Berlin Mandate, 1995- called for the negotiation of binding targets for developed countries.

1997 – Kyoto Protocol adopted, Annex I countries committed to emission reduction targets

2001 – U.S. rejected Kyoto Protocol

2005 – Kyoto Protocol entered into force, after Russia ratified the Protocol

183 countries and the EU have ratified the Kyoto Protocol. Among Annex I countries, Australia ratified the Kyoto Protocol in 2007, Turkey ratified recently, US still remains outside the Kyoto Protocol

Objectives and implementation mechanisms

Emissionsreduction targets:

- ◆ **5.2% reduction af emissions from Annex I in 2008-12 compared with 1990**
- ◆ **30% reduction compared to BaU**

Implementation “mechanisms”

- ◆ **Clean Development Mechanism (CDM)**
- ◆ **Joint Implementation**
- ◆ **Emissions trading**

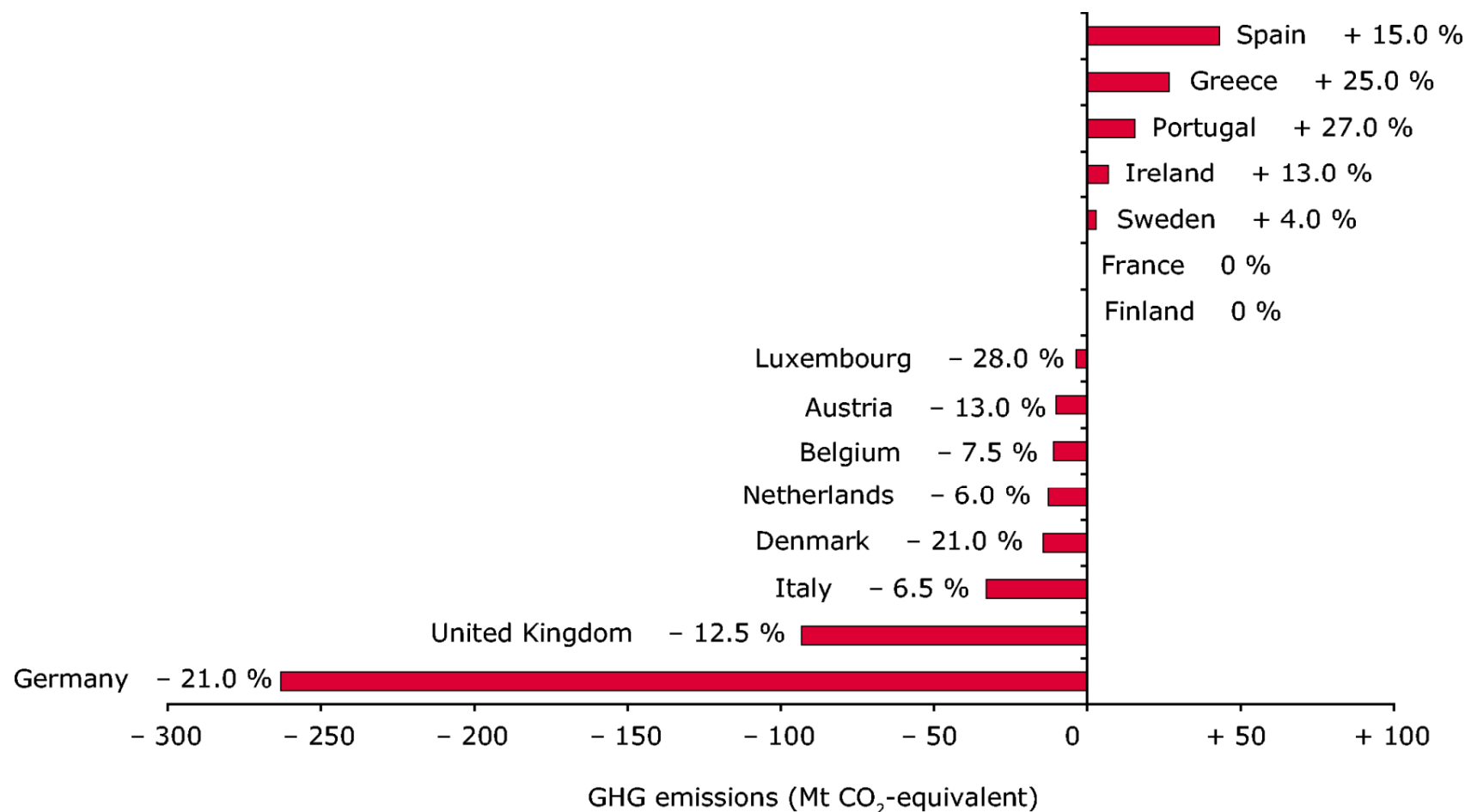
Kyoto Protocol Greenhouse Gases

GHG	100 year Global Warming Potential (GWP)
Carbon dioxide (CO₂)	1
Methane (CH₄)	21
Nitrous oxide (N₂O)	310
Hydrofluorocarbons (HFCs)	140~11700
Perfluorocarbons (PFCs)	6500~9200
Sulphur hexafluoride (SF₆)	23900

Emission Reduction Targets for Annex I Countries

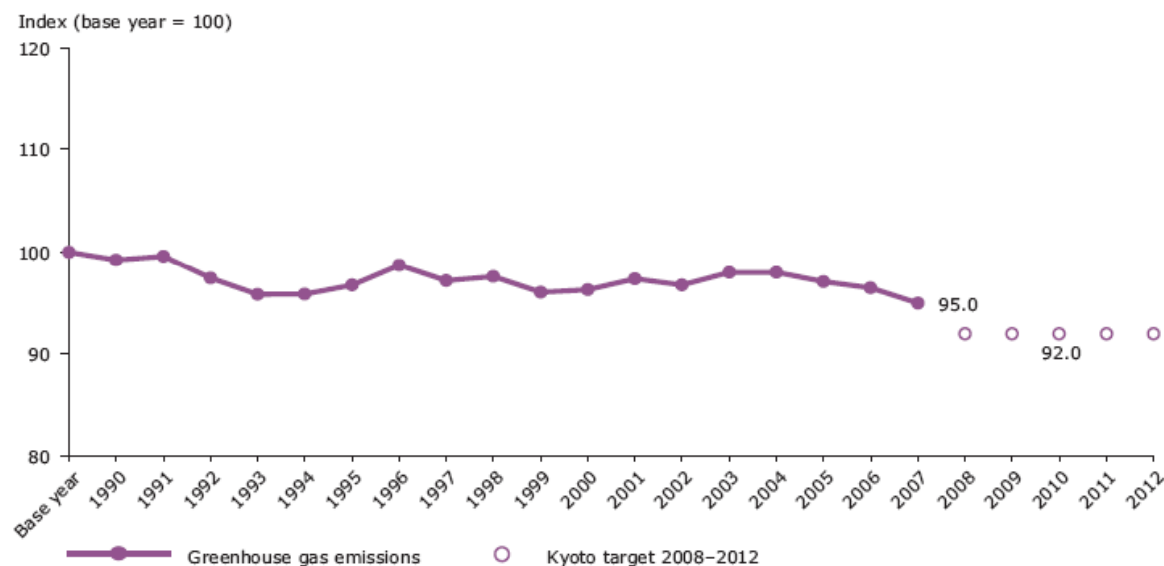
Country	Binding Target (1990 - 2008/2012)
EU-15 (EU Bubble)	-8%
Bulgaria, Czech Republic, Estonia, Latvia, Liechtenstein, Lithuania, Monaco, Romania, Slovakia, Slovenia, Switzerland	-8%
USA	-7%
Canada, Hungary, Japan, Poland	-6%
Croatia	-5%
New Zealand, Russian Federation, Ukraine	0
Norway	+1%
Australia	+8%
Iceland	+10%

Emission Reduction Burden Sharing Among EU-15



Will EU meet its Kyoto Target?

Figure ES.2 EU-15 GHG emissions 1990–2007 (excluding LULUCF) compared with the target for 2008–2012



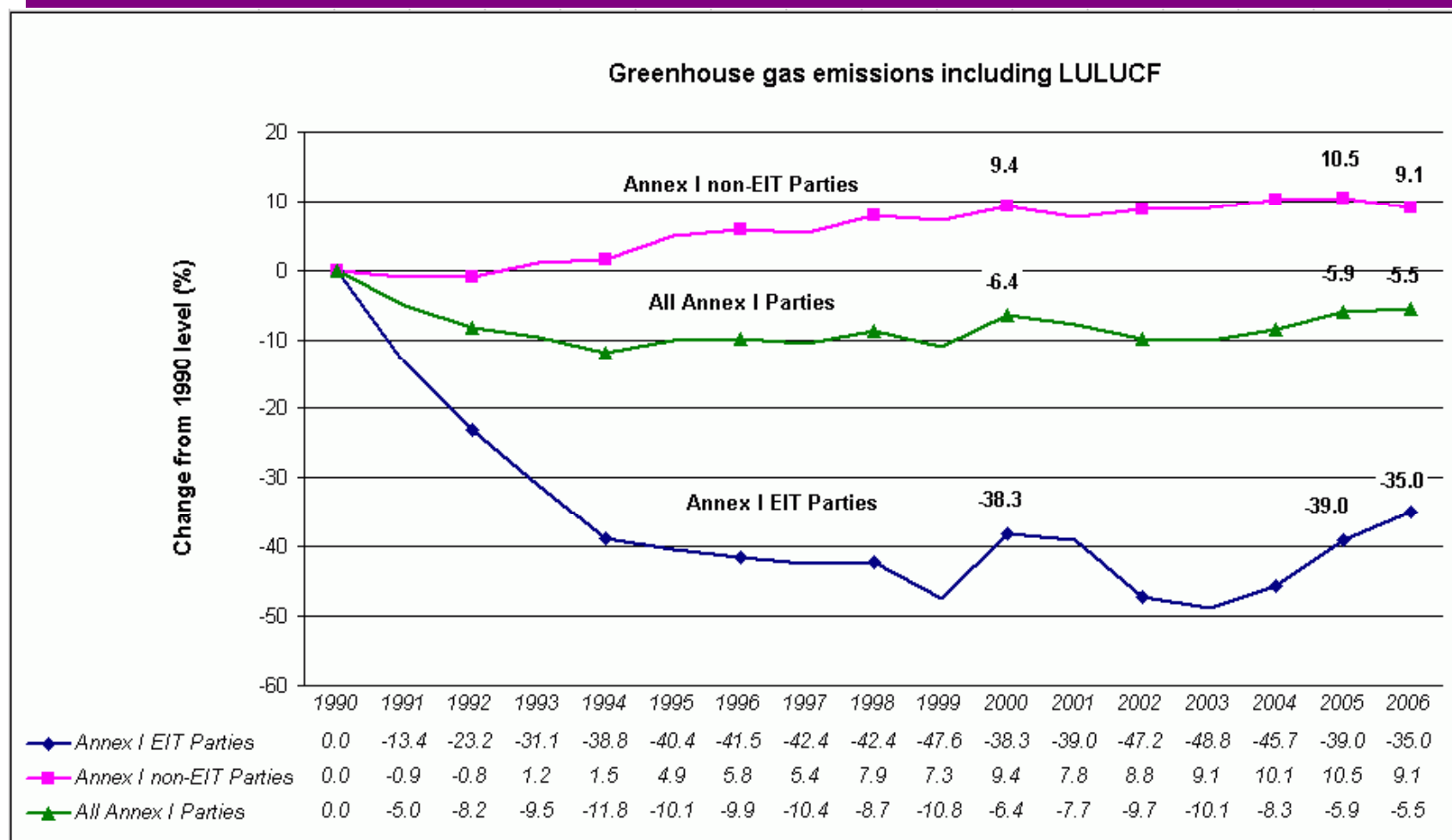
Note: GHG emission data for the EU-15 as a whole refer to domestic emissions (i.e. within its territory) and do not include emissions and removals from LULUCF or emissions from international aviation and international maritime transport.

CO₂ emissions from biomass with energy recovery are reported as a Memorandum item according to the UNFCCC Guidelines and not included in national totals. In addition, no adjustments for temperature variations or electricity trade are considered. The global warming potentials are those from the 1996 revised IPCC Guidelines for National Greenhouse Gas Inventories.

Following the UNFCCC reviews of Member States' 'initial reports' during 2007 and 2008 and pursuant to Article 3, Paragraphs 7 and 8 of the Kyoto Protocol, the base-year emissions for the EU-15 have been fixed to 4 265.5 million tonnes CO₂-equivalents. The EU-15 would need to reduce greenhouse gas emissions by about 341 million tonnes, on average between 2008 and 2012, on the basis of the 2009 greenhouse gas inventory in order to meet its 8 % Kyoto target. This can be achieved through a combination of existing and planned domestic policies and measures, and using carbon sinks and Kyoto mechanisms.

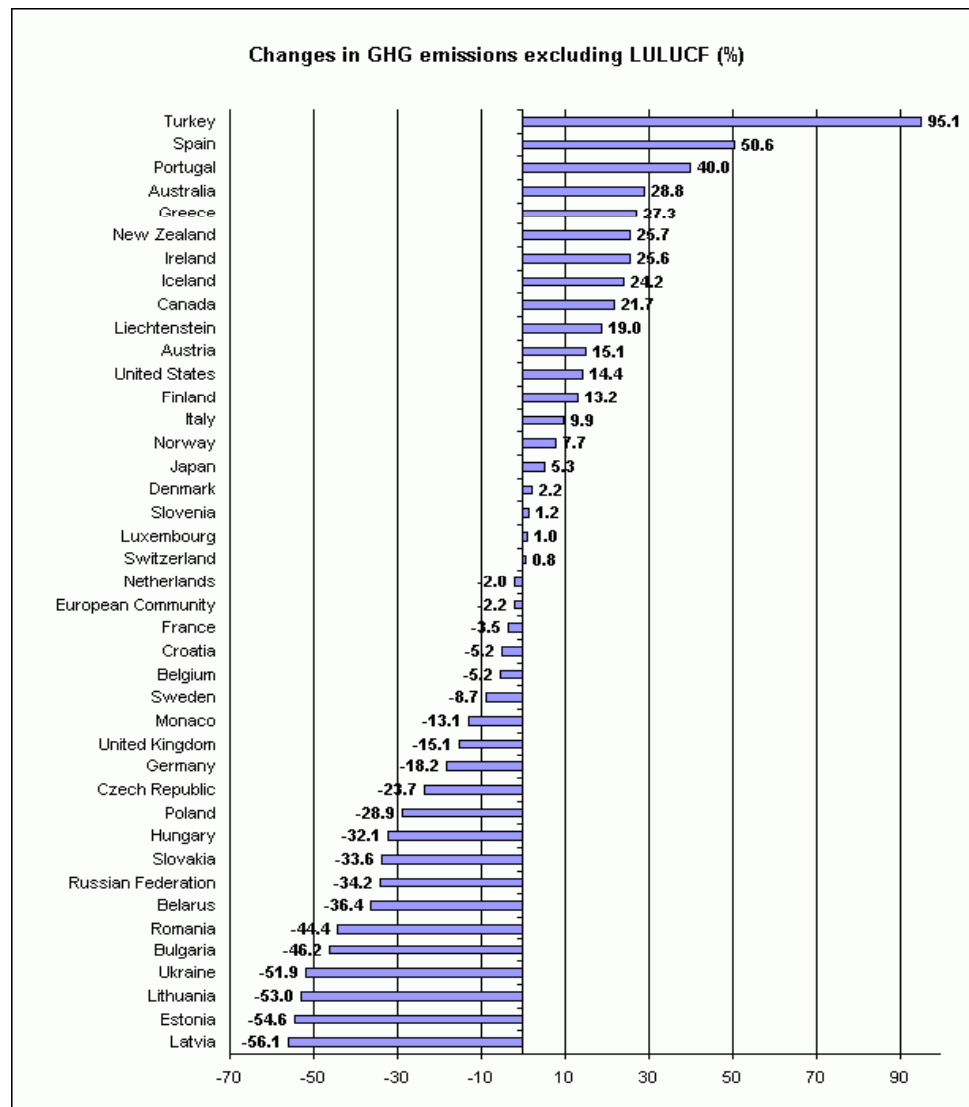
Source: European Environmental Agency (EEA), 2009

Will Annex I meet their Kyoto target? – on track but...



Source: FCCC/SBI/2008/12

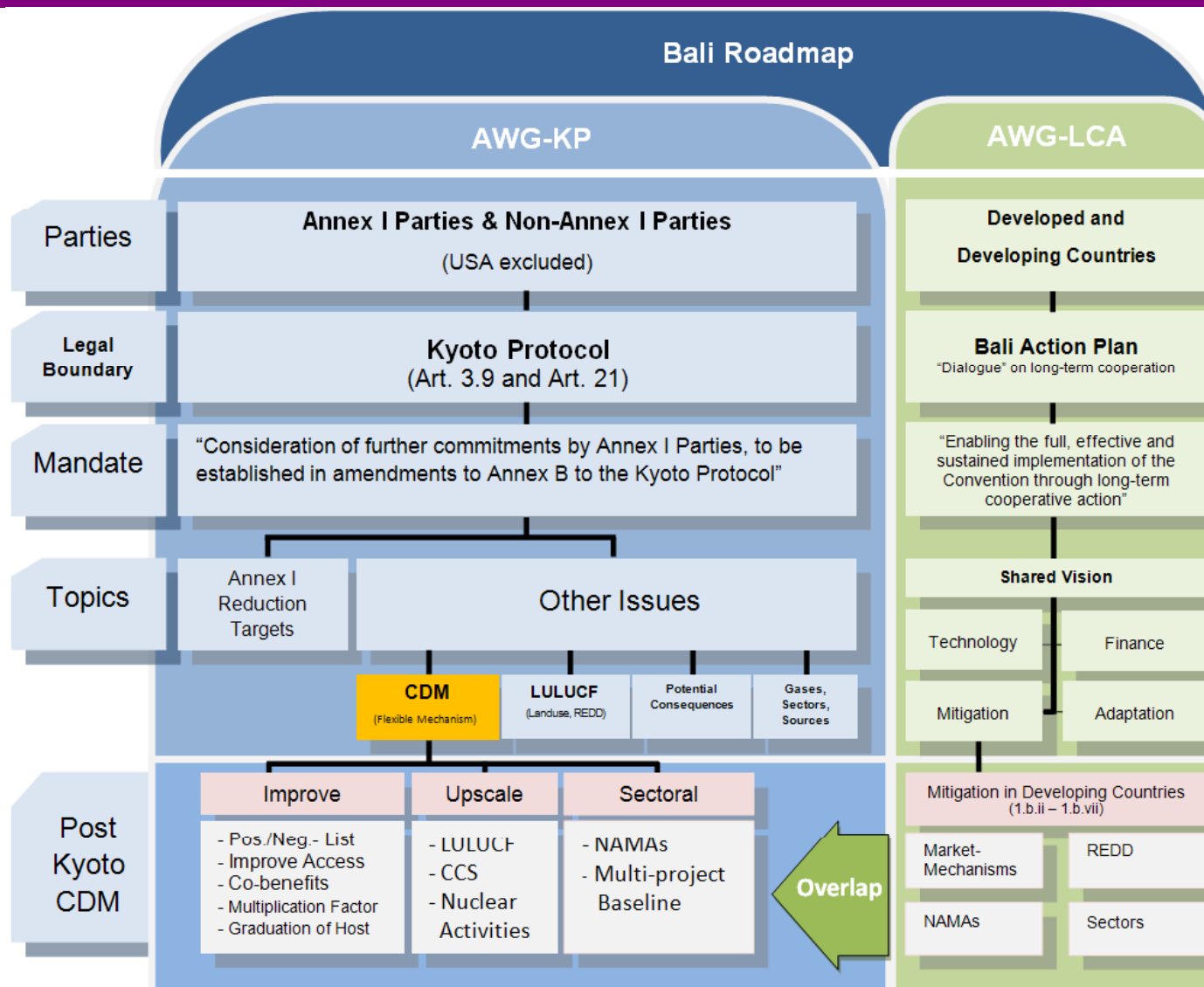
Will Annex I countries meet their Kyoto Targets?



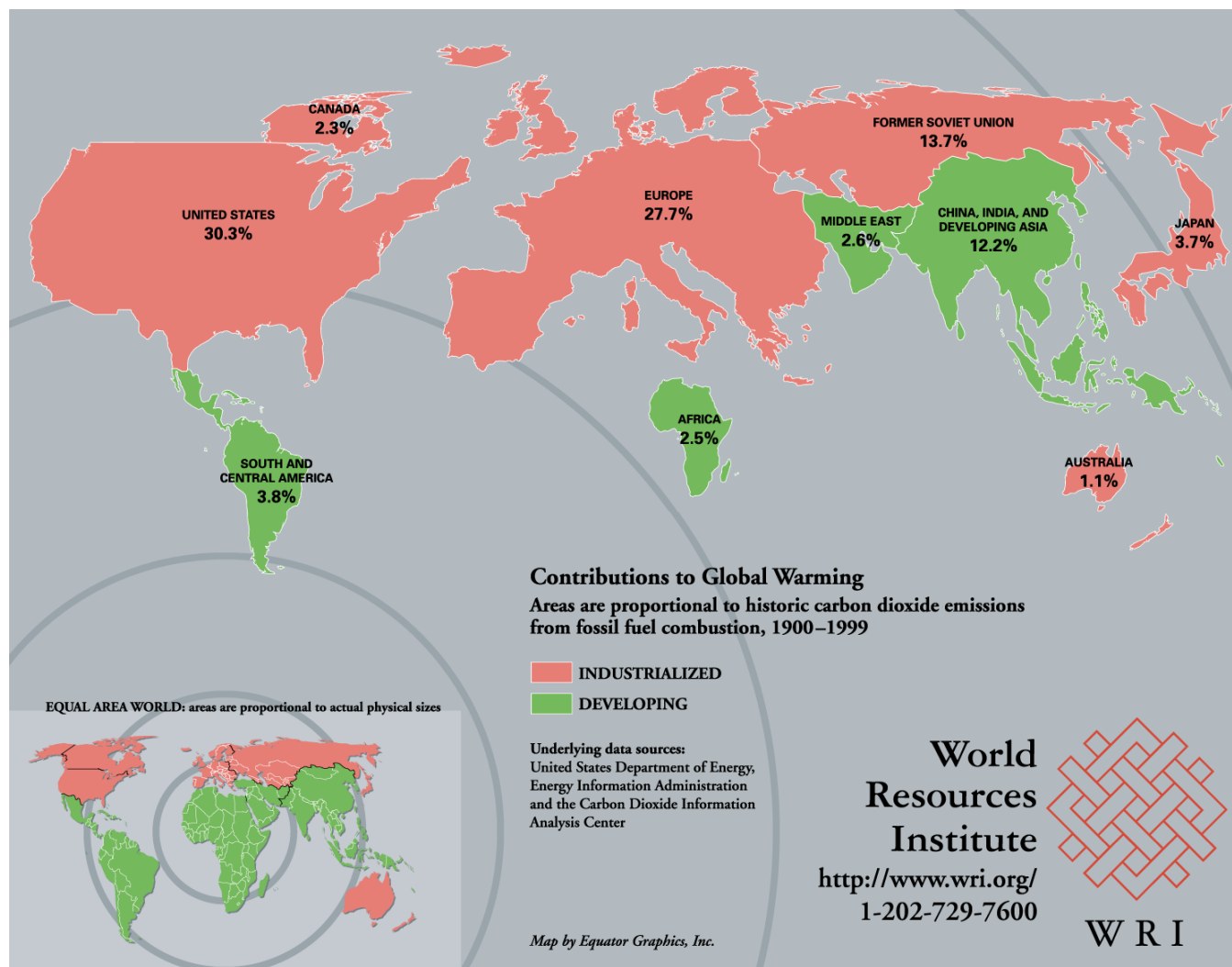
Source: FCCC/SBI/2008/12

Post-2012 negotiations

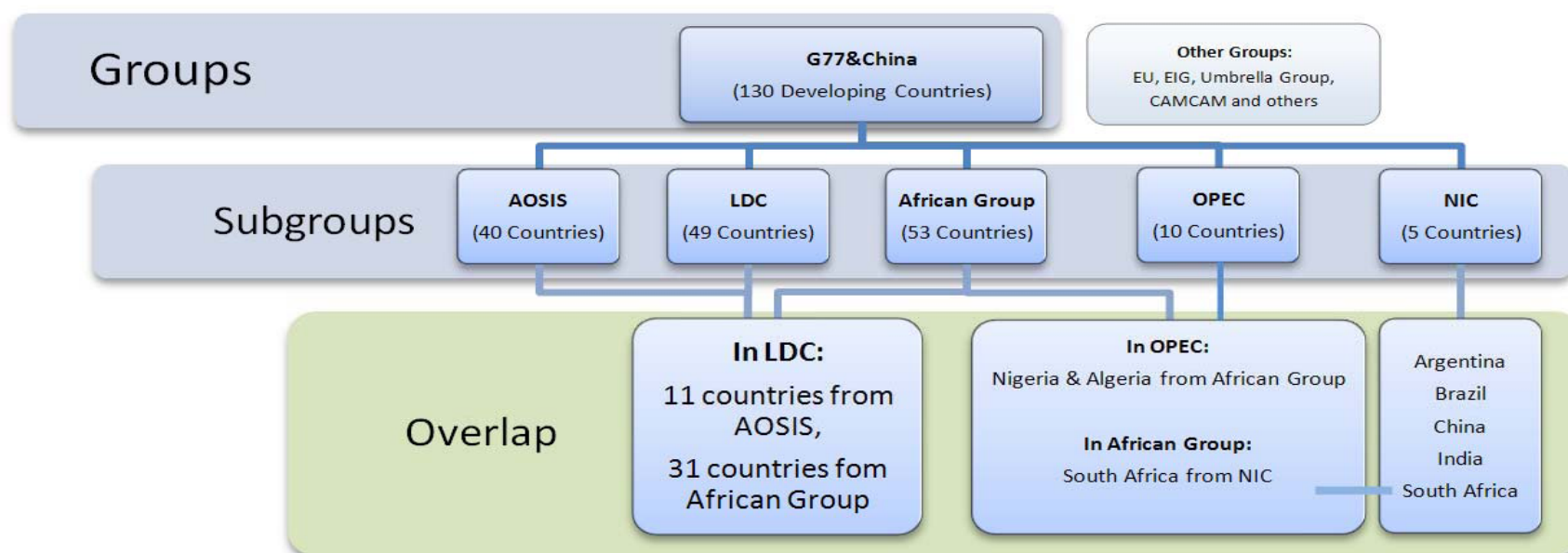
The post-2012 negotiation structure and agenda



North-South Disparity in Climate Change Contribution



Negotiation groups



Main challenges for negotiators

- Delicate balance between engaging major emitters and the economic growth and poverty eradication imperatives of developing countries
- Building strong investment opportunities beyond a pure assistance approach and subsidization; and
- Tying together the developed and the developing world, respecting the principle of common but differentiated responsibilities and the growing sense of common interest.

➤ Finance and mitigation as a key

Thank you!